

**Remarks/Arguments:**

Claims 50-73, presented hereby, are pending.

Claims 26-49 are canceled hereby, without prejudice or disclaimer.

The present claim numbering reflects correction of an error in the numbering of the claims in the previously filed amendment. There was no claim numbered "31" in the previous amendment (claim "32" immediately followed claim "30"); therefore, the claims that were (incorrectly) numbered 32-50 should have been numbered (correctly), claims 31-49. Commensurate changes to claim dependencies are effected, hereby, as well.

Claim 26 is amended hereby as claim 50:

- i) deleting the *proviso multi-component system excluding silanes containing at least two alkoxy groups per molecule*");
- ii) deleting in the legend to residue R<sup>1</sup> of component (d2) "-OH" and "-alkoxy";
- iii) deleting in the legend the residue R<sup>3</sup> of component (d2) "hydroxy";
- iv) deleting in the legend to residue R<sup>4</sup> of component (d2) "hydroxy";
- v) deleting in the legend to residue R<sup>1</sup> of component (d1) "cycloalkenyl";
- vi) deleting in the legend to residue R<sup>2</sup> of component (d1) those formulas containing an alkynyl group, i.e., the second and last formula mentioned after R<sup>2</sup>=R<sup>1</sup>;

- vii) introducing a legend for residue  $R^3$  of component (**d1**), reading "halogen, aryl, alkylaryl, H, halogen-substituted alkyl or aryl groups, alkyl, or combination thereof" (which is different from residue  $R^3$  of component (**d2**)); and
- viii) introducing a legend for residue  $R^4$  of component (**d1**), reading " $R^4=R^3$ , or  $R^4$  is different from  $R^3$ , wherein  $R^4$  is alkyl, methyl, or combinations thereof" (which is different from residue  $R^3$  of component (**d2**)).

So amended, component (d1) does not define compounds containing two alkenyl groups per molecule, two alkynyl groups per molecule, or alkenyl alcohols and component (d2) does not define compounds containing two or more alkoxy groups or two or more hydroxy groups per molecule.

To be consistent with the changes effected in claim 26, claim 30 is amended hereby as claim 54 by:

- i) amending the legend to residues  $R^1$  and  $R^2$  of component (**d1**) as in claim 50;
- ii) amending the legends for residues  $R^3$  and  $R^4$  of component (**d1**) as introduced in claim 50;
- iii) deleting in the legend to residue  $R^5$  of component (**d1**) both formulas mentioned, i.e., the first and sixth alternative, as well as "OH" and "alkylhydroxyl";
- vi) deleting in the legend to residue  $R^1$  of component (**d2**) "-OH" (so that it is identical to the respective legend of claim 50);

- v) deleting in the legends to residues R<sup>3</sup> and R<sup>4</sup> component (d2) "hydroxy" and "alkoxy" (so that it is identical to the respective legend of claim 50); and
- vi) deleting in the legend to residues R<sup>5</sup> of component (d2) "OH" and "-OR".

Additionally, corrections to claim 30 are effected in claim 54; whereby, "R=H, alkyl, alkoxyalkyl or acyl" is deleted from the definition of compound (d1), there being no variable "R" in the (d1) formula.

Present claims 51-53 correspond to claims 27-29 amended to be dependent on claim 50 and to effect minor changes of a formalities nature, in order to more clearly define the invention. Present claims 55-73 correspond to claims (incorrectly numbered) 32-50 (i.e., claims 31-49, as correctly numbered) amended to depend on claim 50, directly or indirectly.

The claims were rejected under 35 USC 112, ¶1, for allegedly lacking descriptive support in the application as originally filed ("new matter" rejection). Reconsideration is requested in view of the amendments to the claims effected, hereby.

According to the statement of rejection, the *proviso* clause in the claims, i.e., "said multi-component system excluding silanes containing at least two alkoxy groups per molecule," constitutes new matter. In that the *proviso* clause is deleted from the claims, hereby, the rejection is rendered moot and, therefore, withdrawal of the rejection is in order.

There are no prior art rejections presently of record. However, the final rejection remarks that deleting the *proviso* from the claims would result in "reinstatement" of the withdrawn rejection under §102(b) based on US5696209 (King) (Office Action page 4). Remarks concerning other withdrawn

rejections and prior art of record are made – "As an aside" (Office Action pages 4-5) – but the reasons are unclear, e.g., with respect to "reinstatement" of the other withdrawn rejections.

Accordingly, and in any event, in an effort to advance prosecution, applicants provide the following remarks, without prejudice, concerning the art relied on in withdrawn rejections with respect to the invention defined in the claims as presently amended.

None of the withdrawn rejections of record under §102 and §103 is applicable against the claims, as amended, hereby.

King fails to teach either of the alternative (d) components, i.e., alternative components "(d1)" and "(d2)", of the combined components (a)-(d) in the present claims.

As explained in applicants' last response, King discloses compositions comprising:

- as component (A) an alkenyl functional siloxane resin;
- as component (B) is SiH containing polyorganosiloxane;
- as component (C) a silane;
- as component (D) a hydrosilylation catalyst;
- as component (E) a moisture curing catalyst; and
- optionally, as component (F) an alkynyl functional polydiorganosiloxane

Especially – as disclosed in King, column 3, lines 26 to 30, in connection with column 3, lines 9-12, and in claim 1 – if component (A), component (B), or component (F) contains the moisture curing radical  $ZSiR^1_x(OR^2)_{3-x}$  with  $R^2$  being  $C_1$ - $C_3$  alkyl or alkoxyalkyl and  $x=0$  or  $1$ , then it contains at least two alkoxy or alkoxyalkyl residues as Si-OR groups. Similarly, component (C) of King, which

has the formula  $R^1_{4-y}Si(OR^2)_y$ , with  $R^2$  being  $C_1-C_3$  alkyl or alkoxyalkyl and  $y=2$  to 4 (cf. column 4, line 42-48), contains at least two alkoxy or alkoxyalkyl residues as Si-OR groups. Concerning combined components (a), (b), (c), and (d2) of the present claims, as opposed to King combined components (A) - (C) and (F), the "Si-OR compound" (component "(d2)") recited in the present claims can contain only one alkoxy group, i.e., when "R" is "alkyl" in the formula SiOR.

Moreover, the combination of components (a), (b), (c), and (d1) of the present claims is neither taught nor suggested by King's disclosure of compositions containing an alkynyl functional component (F). This is because King component (F) mandatorily comprises either two alkenyl- or two alkynyl residues (cf. column 5, line 38-39; column 3, line 3). Whereas, component (d1), according to the present claims, contains, if any, only one alkenyl group.

Consequently, the compositions disclosed by King do not render unpatentable the multicomponent system according to the present claims.

The composition described by Antonen (US 4,754,013) comprises an organopolysiloxane containing two vinyl radicals per molecule, an organohydrogensiloxane, a hydrosilylation catalyst, and a moisture curable organosiloxane; the latter of which comprises a mixture of i) a liquid hydroxyl terminated polydiorganosiloxane, ii) a silane carrying three alkoxy groups (cf. column 3, line 35-38), and iii) a titanium orthoester catalyst.

According to the formula in Antonen, column 8, component i) mandatorily comprises two hydroxy groups per molecule. As explicitly disclosed in the reference (column 7, lines 33 to 41), the hydroxyl-terminated polydiorganosiloxane and the curing agent can be pre-reacted to obtain a

organopolysiloxane and an organohydrogenpolysiloxane, in the presence of a suitable catalyst. The other reaction step involves either (i) a condensation reaction between the (at least one) "Si-OR compound (d2)" and an organohydrogen-polysiloxane, in the presence of a condensation catalyst or, alternatively, (ii) a hydrosilylation reaction between an alkynyl-functional organopolysiloxane and an organohydrogen-polysiloxane. As recited in present claim 68, the composition (1) transitions from its initial ("mixer suitable") consistency, during and after the mixing period, to (2) its second ("plastic phase") consistency, and (3) cures to its final stage ("final plastic form"), after a presettable potlife, during which "dental impressions" are made. No such material is taught or suggested by the prior art.

King (cf. e.g. column 1, line 4-6; column 1, line 66-column 2, line 1; column 2, line 56-61; column 8. lin 10-16), as well as Antonen and Lutz, refer solely to moisture curing adhesive compositions. The demands on adhesives, on the one hand, and the demands on impression materials, on the other, are quite different. This is exemplarily demonstrated by the fact that Antonen teaches that its adhesive compositions should not have a Shore A hardness greater than 20 (cf. column 3, line 56-58); whereas, the Shore A hardness of a composition according to the present claims is 70 (cf. present specification, pg. 33, line 12).

A person skilled in the art confronted with the aforesaid problems facing applicants, i.e., problems associated with combining incompatible impression materials, would not have found the presently claimed solution in the teachings of King, Antonen, and Lutz.

polydiorganosiloxane containing at least two alkoxy groups (of the curing agent) at each of the two terminal positions. In other words, Antonen component i) has to provide a hydroxy group at each of its two terminal positions.

Thus, Antonen component i) fails to meet component (d2) of the present claims, since the component (d2) compound contains only one hydroxy group, if any, per molecule. Furthermore, the composition according to Antonen does not comprise an alkynyl-group-functional compound, as opposed to the present claims. Thus, Antonen does not render unpatentable the subject matter of the present claims.

Applicants would stress that, when two silicone impression materials having different consistencies were combined as taught in the prior art, it was associated with disadvantages, e.g., inconvenient handling, the risk of wrong dosing, and the risk of non-homogenous mixing of the two materials (cf. present specification pg. 2, last par. - pg. 5, 1<sup>st</sup> par.). When light-to-heavy-body (so called) putty-cartridge materials were employed, there was the drawback of having a short pot life (cf. present specification pg. 5, 2<sup>nd</sup> and 3<sup>rd</sup> par.).

It is an object of the presently claimed invention to provide a mixer-suitable material based on addition-cross-linkable polydimethylsiloxanes, which is easily dispensed from automatic mixing and dosing systems. Surprisingly, this object is obtained by the presently claimed invention. Two transitions of consistency are achieved in accordance with the instant invention because the presently claimed composition ("system") cures in a two-step reaction mechanism. One of the reaction steps involves a hydrosilylation reaction (additional polymerization) between an alkenyl-functional

As to the case law cited in the last Office Action on page 4, 2<sup>nd</sup> paragraph, it is not on point with the facts of the present case. In any event, the claim preamble is not the matter at issue. As explained, above, none of Lutz, King, and Antonen, taken alone or in combination, teaches or suggests all the features (limitations) of the present claims. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). A "ground of rejection is simply inadequate on its face . . . [when] the cited references do not support each limitation of [the] claim." *In re Thrift*, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). When conducting an obviousness analysis, "all limitations of a claim must be considered in determining the claimed subject matter as is referred to in 35 U.S.C. 103 and it is error to ignore specific limitations distinguishing over the [prior art] reference." *Ex parte Murphy*, 217 USPQ 479, 481 (PO Bd. App. 1982).

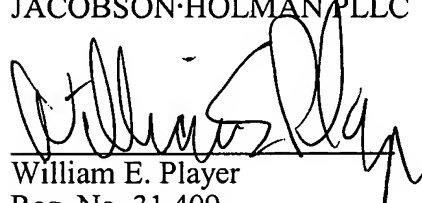


Favorable action is requested.

Respectfully submitted,

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